[54] **COMPLEX PATTERN RECOGNITION METHOD AND SYSTEM**

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[57] **ABSTRACT**

A method and system for recognizing complex patterns, such as Chinese characters (or Kanji), identifies patterns by stroke recognition using detailed information about stroke shape and specifically curvature characteristics. Written strokes are categorized into different specific stroke types and are assigned stroke identity labels by comparison of distance metrics generated with refer-ence to stroke templates, each template comprising information specifying position of a point and permissi-ble deviation for each such point along a stroke. Devia-tion values may differ from point to point and from stroke type to stroke type. The data on the written stroke may be rotated or displaced relative to each stroke template to enhance the likelihood of stroke recognition. Limited information about stroke position relative to other strokes may be preserved and em-ployed to resolve ambiguities among accumulations of stroke identity labels found to ambiguously indicate more than one pattern or character.

42 Claims, 8 Drawing Figures

WRITTEN CHARACTER PROCESSING SYSTEM